

of the principal phenomena of the four seasons, through the medium of chemistry, and to show that in tracing these operations of nature, "there is not so much required any strength of imagination, or exactness of method, or depth of contemplation, as a sincere hand and faithful eye to examine and to record the things themselves as they really appear." The author has not confined himself to a mere explanation of the most striking phenomena of the Four Seasons, but has introduced a variety of other interesting and useful information.

Throughout the work, the experimental illustrations are of the simplest character, and can be performed with apparatus always to be had at a trifling cost, whilst the directions for their performance are given so explicitly that the merest tyro in chemistry may attempt them with a certainty of success. Whenever it could be done, the subject has been treated practically, and the information brought to bear on the every-day concerns of life; as an instance of which may be adduced the remarks on warming apartments, and the numerous errors committed by architects and builders in the construction of fireplaces and furnaces, are clearly and judiciously pointed out. The remarks of the author on warming and ventilation are well deserving of attention, and if attended to, would prevent the many inconveniences and discomforts now complained of during the cold season.

We can most confidently recommend this little work, and feel convinced that no one can rise from a perusal of it, without having gained much useful information, and, to use the words of the author, "seeing that everything is beautiful in its season, that everything displays the power and goodness of God. So that man cannot say, this is worse than that, for in time they shall be approved."

R. E. G.

ART. XIX.—*A Practical Treatise on Ventilation*. By MORRILL WYMAN. Boston, 1846. 18mo. pp. 420.

THE importance of proper ventilation is every day pressing itself upon the more intelligent portions of communities, and the statistics of towns, hospitals, ships and prisons, all tend to corroborate the great truth of our author's motto, "Plures occidit aer quam gladius."

In the last number of this Journal,* we referred to certain branches of the subject, treated of by Mr. Farr, in his letter accompanying the "Fifth annual report of the Registrar General, of births, deaths, and marriages in England." Mr. Farr has described in strong terms—but no stronger than truth justified—the ill effects resulting from impurities of the air, such as halitus from the breath, and perspiration of animals, &c. The mortality of the crowded metropolitan hospitals from gangrene, erysipelas, &c., compared with that of the smaller country hospitals, affords a striking illustration of the absolute necessity of means of ventilation, essential to the preservation of life, to say nothing of the comfort of persons, collected together in circumscribed limits.

The author of the book before us has favoured the public with a highly valuable treatise, embodying those principles and modes of ventilation which have been most successfully applied in Europe as well as in America. He has, in the first place, described the laws and properties of gases generally; especially the law of their diffusion, so important in its influence upon ventilation.

Secondly, the chemical and physical properties of the atmosphere.

Thirdly, the processes by which atmospheric air may become vitiated; particularly the processes of respiration and combustion, and the nature of the gases produced by them.

Fourthly, the means by which impurities, whether chemical or mechanical, may be removed from atmospheric air.

Fifthly, the principles of the movements induced in air by heat, especially those occurring in apartments, and in chimneys.

Sixthly, the moving power best adapted to ventilation, and the quantity and qualities of the air which should be supplied.

* See Am. Journ. of Med. Sciences, for October, 1846, pages 430, etc.

Lastly, the mechanical arrangements best adapted to effect the ventilation of the various structures to which they are applied.

In treating these several topics he has introduced an immense mass of details, collected from the best sources, and what we deem of the greatest importance, filled his pages with illustrative cuts which will greatly aid those who wish to reduce his descriptions to practice.

No one can peruse Mr. Wyman's book without gathering from it much valuable information upon subjects connected with health or comfort and the welfare of those who may be crowded together in situations favouring vitiation of the air.

G. E.

ART. XX.—*New Remedies*. By ROBLEY DUNGLISON, M. D., Professor of the Institutes of Medicine, &c., in the Jefferson Medical College of Philadelphia. Fifth Edition, with extensive additions. *Professe quam conspici*. Philadelphia, Lea and Blanchard: pp. 639, 8vo.

ON the appearance of the various editions of this useful work, we have already expressed our opinion of its value to the profession, and have therefore merely to say, that the present one is much improved and enlarged by the addition of numerous notices of the properties and actions of substances of recent introduction into the *materia medica*, and of novel applications of articles long esteemed for other purposes, and the author is entitled to much praise for the industry and care exerted in the selection of his materials, from the mass of crude and erroneous notices and opinions so plentifully scattered through many of the recent works on the *materia medica*, and the pages of medical journals. R. E. G.

ART. XXI.—*Special Anatomy and Histology*. By WM. E. HORNER, M. D., Professor of Anatomy in the University of Penn., &c., &c. Seventh Edition, with numerous illustrations. Philadelphia, Lea and Blanchard, 1846: 2 vols., pp. 570 and 551.

THE name of Professor Horner is a sufficient voucher for the fidelity and accuracy of any work on anatomy, but if any further evidence could be required of the value of the present publication, it is afforded by the fact of its having reached a seventh edition. It is altogether unnecessary now to inquire into the particular merits of a work which has been so long before the profession, and is so well known as the present one, but in announcing a new edition it is proper to state that it has undergone several modifications and has been much extended, so as to place it on a level with the existing advanced state of anatomy. The histological portion has been remodeled and rewritten since the last edition; numerous wood cuts have been introduced, and specific references have been introduced throughout the work to the beautiful figures in the "*Anatomical Atlas*," by Dr. H. H. Smith.

ART. XXII.—*Encyclopedia Americana: Supplementary volume. A Popular Dictionary of Arts, Sciences, Literature, History, Politics and Biography*, vol. xiv. Edited by HENRY VETHAKE, LL.D., Vice Provost and Professor of Mathematics in the University of Pennsylvania, &c., &c. Philadelphia, Lea and Blanchard, 1847. 8vo. pp. 663; double columns.

It would be out of place here to review a work like the present, but we may be doing a service to our readers by announcing to them its publication, embodying as this does an immense fund of information, interesting and useful to every liberally educated person, and which cannot be met with elsewhere in a condensed and connected form.